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| AUTHOR | Millett, John D. |
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ABSTRACT

This document reviews the financing of current operations of higher education. Part I analyzes higher education income and expenditures, 1968-69. A review of studies of higher education financing is presented in Part II. Appendixes include conversion tables of current funds revenues and expenditures. (MJM)

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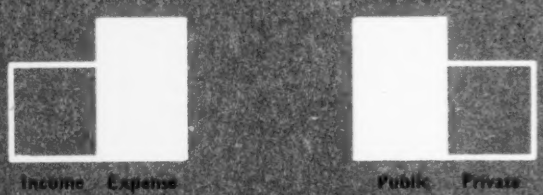
# FINANCING CURRENT OPERATIONS




OF

# AMERICAN HIGHER EDUCATION

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DECEMBER, 1972

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**DR. JOHN D. MILLETT,** Vice President and Director of the Management Division, Academy for Educational Development, is Chancellor Emeritus of the Ohio Board of Regents and former President of Miami University of Ohio. The author of ten books and over 100 articles, a recent publication written by him is *Personnel Management in Higher Education*, another Management Division release.

ED 074917

# FINANCING CURRENT OPERATIONS OF AMERICAN HIGHER EDUCATION

by

**John D. Millett**

Vice President and Director
Management Division

Management Division
Academy for Educational Development, Inc.
Washington, D.C.
December, 1972

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# PART I

## ANALYSIS OF HIGHER EDUCATION INCOME AND EXPENDITURES, 1968-69

*The only comprehensive data available to us about the current funds revenues and expenditures of higher educational institutions are those periodically published by the National Center for Educational Statistics of the Office of Education, U.S. Department of Health, Education, and Welfare. Unfortunately, these data are not published on a regular schedule and are not so timely as they should be.*

*The data currently available are those for 1968-69, which were published in 1970. The data for 1969-70 or 1970-71 are not available for public analysis, and inquiry has failed to provide any clear indication when we may expect publication of these data. As a consequence, anyone wishing to make an analysis of comprehensive data about the financing of our institutions of higher education must make use of these 1968-69 data or wait until such time as data for the later academic years become available for public scrutiny.*

This circumstance is the more serious at present because 1968-69 probably marked a watershed year in the history of higher education finance in the United States. An economic recession began in November or December of 1969, and the downswing in economic activity continued until December, 1970. Although there has been a rising level of economic activity since 1970, the full impact of the downswing probably was not evident in higher education until the academic year 1970-71 and even into the academic year 1971-72.

Secondly, some fundamental changes in federal government support of research began to take place in 1969, with the full impact, again, not becoming evident until 1970. Moreover, state government financing of increased expenditures for higher education began to slow up in the state legislatures of 1971, if not earlier.

The "new depression" in higher education—of which Earl Cheit wrote in 1971 for the Carnegie Commission on Higher Education—was probably not yet reflected in the reporting of financial data for 1968-69. Not until data become available for 1971-72 will we have a comprehensive and comparable base for looking at the important changes which probably took place between 1969 and 1972.

At the same time, the data on the current funds income and expenditures of institutions of higher education for 1968-69 cannot be dismissed for lack of any value for 1972 or 1973. As already suggested, 1968-69 probably represented a watershed year in financial support of higher education.

More importantly, the Office of Education financial data for 1968-69 were the first reported data from institutions of higher education reflecting the new chart of accounts recommended by the American Council on Education.[1] This new chart of accounts was more than simply an introduction of some new categories for reporting the financial transactions of higher educational institutions. For the first time, an integrated analysis of income and expenditures of colleges and universities was possible.

This integration of income and expenditure accounts is very important in any analysis of institutions of higher education, for a very simple reason. Much of the income of a college or university is earmarked income. For example, income from the federal government is categorical, not general income. Such income must be utilized for specified purposes; it is not "free" income to a college or university to be used at the discretion of the board of trustees.

Similarly, most appropriations by state governments for the support of public or state-assisted colleges and universities are made for student instruction, plus two or three other specified purposes, such as operation of a teaching hospital, an agricultural experiment station, or an agricultural extension service.

The endowment and gift income of both private and public institutions of higher education is frequently restricted in terms of its use. To a very large extent, the only "free" income a college or university receives is the income collected from charges to students for instructional service.

The importance of the new chart of accounts proposed for institutions of higher education in 1968 can best be illustrated by juxtaposing the principal categories of income and expense. This has been done in the accompanying table. It is evident from this particular arrangement of revenues and expenditures that many accounts are intended to be integrated; that is, available income is intended to be closely related to actual expenditures. This is obviously true of sponsored research and sponsored programs, as well as of auxiliary enterprises and student aid.

Personally, I believe the chart of accounts as recommended by the American Council on Education could be simplified and rearranged. In addition, it should be noted that the National Center for Higher Education Management Systems has proposed a quite different classification of activities for analytical purposes, although, apparently, that classification is supplementary to rather than a replacement of this chart of accounts.[2] At the moment, these modifications are not nearly so important as are the data on revenues and expenditures of institutions of higher education for 1968-69 as reported by the National Center for Educational Statistics.

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[1] American Council on Education, *College and University Business Administration*, revised edition (Washington, D.C.: American Council on Education, 1968), p. 223.

[2] Cf. Planning and Management Systems Division, Western Interstate Commission for Higher Education, *Program Classification Structure* (1970).

TABLE 1

Recommended
Current Funds Revenues Accounts
and
Current Funds Expenditures Accounts

| Revenues | Expenditures |
|---|---|
| **Educational and General** | |
| Student Tuition and Fees | Instruction and Departmental Research |
| Governmental Appropriations | Organized Activities Related to Educational Departments |
| Endowment Income | |
| Unrestricted | Sponsored Research |
| Restricted | Other Separately Budgeted Research |
| Trust Funds held by Others | Other Sponsored Programs |
| Gifts | Extension and Public Service |
| Unrestricted | Libraries |
| Restricted | Student Services |
| Estimated Value of Contributed Services | Operation and Maintenance of Physical Plant |
| Sponsored Research | General Administration |
| Governmental | Staff Benefits |
| Nongovernmental | General Institutional Expense |
| Other Sponsored Programs | |
| Governmental | |
| Nongovernmental | |
| Recovery of Indirect Costs-Sponsored Programs | |
| Sales and Services of Educational Departments | |
| Organized Activities Related to Educational Departments | |
| Other Income | |
| **Student Aid** | |
| Gifts | Undergraduate |
| Endowment Income | Scholarships |
| Governmental Appropriations | Grants |
| Other | Prizes and Awards |
| | Remission of Fees |
| | Graduate |
| | Fellowships |
| | Grants |
| | Prizes and Awards |
| | Remission of Fees |
| **Auxiliary Enterprises** | |
| Intercollegiate Athletics | Intercollegiate Athletics |
| Residence Halls | Residence Halls |
| Faculty Housing | Faculty Housing |

(Continued)

TABLE 1 (Continued)

| Revenues | Expenditures |
|---|---|
| Auxiliary Enterprises (Continued) | |
| Food Services | Food Services |
| College Union | College Union |
| Student Store | Student Store |
| Student Health Service | Student Health Service |

SOURCE: American Council on Education, *College and University Business Administration*, pp. 230-235. I have made a few modifications but only as suggested in the chart of accounts itself.

## Major Categories of Income and Expenditure

We may begin by looking at income and expenditure as a whole, with a breakdown only between public and private institutions and between major categories of programs or activities. These data are shown in Table 2. Expenditures exceeded income when the item of current funds expended for physical plant assets is included in the expenditure category. In the remainder of this discussion, we shall exclude any reference to these expenditures for plant improvements.

Insofar as total income and expenditure are concerned, for the 2,312 colleges and universities responding to the survey, income exceeded expenditures by approximately 400 million dollars. At publicly sponsored institutions of higher education, the surplus of income over expenditures comes to almost 340 million dollars. For the privately sponsored institutions of higher education, current funds income exceeded expenditures by only 56 million dollars.

The distribution of total income between public and private institutions was 60 percent to 40 percent. The enrollment data reported in connection with the financial survey indicated a distribution of 70 percent in public institutions and only 30 percent in private institutions. As a consequence, in terms of total expenditures per student, the private colleges and universities expended $3,361 dollars per student, while the public institutions expended $2,105 per student.[3] Such a gross comparison can be misleading, and some effort at correction will be made below.

When one turns to income and expenditures by major categories, one may make certain important observations. For the purpose of this analysis, I have classified both income and expenditures under five headings. The data have been obtained by a rearrangement and some consolidation of the income and expenditure data provided by the National Center for Educational Statistics.[4] In making this new classification, I have tried

[3] *Financial Statistics of Institutions of Higher Education: Current Funds Revenues and Expenditures, 1968-69*, Table C.

[4] See Appendix I for Conversion Table—Current Funds Revenues.

**TABLE 2**

Current Funds Revenues and Current Funds Expenditures of Institutions of Higher Education
1968-69
(Millions of Dollars)
All Operations

| | Total | Public | Private |
|---|---|---|---|
| INCOME | $18,974 | $11,852 | $ 7,122 |
| EXPENDITURES | 19,154 | 11,929 | 7,225 |
| Expenditures for Plant Improvements | 575 | 416 | 159 |
| NET CURRENT FUNDS EXPENDITURES | $18,579 | $11,513 | $ 7,066 |
| By Major Categories | | | |
| INCOME | | | |
| Instruction & General | $11,732 | $ 7,709 | $ 4,023 |
| Sponsored Research | 2,594 | 1,340 | 1,254 |
| Public Service Programs | 1,373 | 943 | 430 |
| Auxiliary Enterprises | 2,696 | 1,561 | 1,135 |
| Student Aid | 579 | 299 | 280 |
| EXPENDITURES | | | |
| Instruction & General | $10,720 | $ 6,903 | $ 3,817 |
| Sponsored Research | 2,745 | 1,499 | 1,246 |
| Public Service Programs | 1,747 | 1,275 | 472 |
| Auxiliary Enterprises | 2,544 | 1,464 | 1,080 |
| Student Aid | 823 | 374 | 449 |

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Financial Statistics of Institutions of Higher Education: Current Funds Revenues and Expenditures, 1968-69* (Washington: U.S. Government Printing Office, 1970), Table 1 and Table 2. Detail may not add to total because of rounding.

to achieve some integration of income and expense by the major program categories of higher educational activity as I perceive them: instruction and general operation, research, public service, auxiliary enterprises, and student aid.

Insofar as instructional and general activities are concerned, available income exceeded reported expenditures by some one billion dollars. The difference for public institutions amounted to some 800 million dollars, while the difference for private institutions amounted to some 200 million dollars. As one proceeds with the analysis of this income and expenditure, it becomes apparent that this surplus was utilized in large part to offset deficits in other program categories.

Auxiliary enterprises had a total income of nearly 2.7 billion dollars in 1968-69, as against current expenditures of approximately 2.5 billion dollars. Both public and private institutions had income in excess of expenditures. It is probable that these surpluses went into debt service reserves and replacement reserves for such activities as residence halls, dining halls, student unions, bookstores, student health facilities, and similar services.

The data reported in 1968-69 showed income for sponsored and separately budgeted research in the amount of nearly 2.6 billion dollars, as against expenditures of more than 2.7 billion dollars. The deficit came to 150 million dollars. Moreover, this deficit seems to have occurred entirely at public institutions. The private institutions reported research income somewhat larger than research expenditures for 1968-69. The discrepancy in experience could result from differences in financial reporting or in the appropriation by state government of certain lump sum amounts, part of which were used for instruction and part of which were used for separately budgeted research. The second is the more probable explanation.

Again, the expenditures for major public service programs exceeded income earmarked for these programs. Such a deficit was reported at both public and private institutions, but was substantial for the public institutions. Under income, the Office of Education report form requested information about "other sponsored programs" and "major public service programs." This last category included the income for operation of wholly funded federal government research and development centers like the Los Alamos Center or the Jet Propulsion Laboratory. This income and expense have been included here under sponsored research. Under the heading of expenditures, the report called for information about "other sponsored programs," "extension and public service," hospitals, and other public service programs. These categories have been combined into one grouping of "public service programs" in Table 2. The cost of teaching hospitals, included in this category, could explain a large part of the deficit.

Student aid income reported by colleges and universities in 1968-69 was nearly 245 million dollars less than the expenditures of these institutions for student aid. It is notable that the institutions added almost 50 percent more to student aid expenditure than they received in student aid income. This practice has been familiar to persons studying higher education financing for some time. In addition to government, endowment, and gift support, colleges and universities as a group have utilized general income in order to help pursue their objective of providing equal educational opportunity for individuals of similar academic competence but of disparate socio-economic status.

Finally, it may be noted that of the 575 million dollars of current funds revenues committed to plant improvements, some 70 percent of this outlay was made by the public institutions, which were compelled to accom-

modate about 80 percent of the enrollment expansion of higher education in the decade of the 1960's.

## Principal Sources of Income

Once we have acquired an overview of income and expenditures of institutions of higher education by major program categories, we need to turn to more particular information about the sources of income. We summarize the available data for 1968-69 in Table 3.

The clear fact about income for the instruction and general operation of institutions of higher education as of 1968-69 is that the largest single source of such income was that from the 50 state governments, followed closely by the income obtained from charges to students. Some 40 percent of total instructional income was provided by state governments, while one-third was derived from charges to students. It is noteworthy that local units of government provided more instructional income than did the federal government. It should be remembered that most public community colleges obtain financial support from school districts or from counties. And, it should also be remembered that federal government financial support of instruction is largely directed to the military academies, Howard University, and Federal City College.

As would be expected, the importance of state government support of instruction and the importance of student charges become much more meaningful when institutions of higher education are divided into a public and a private category. Some 60 percent of the instructional income of public institutions of higher education was derived from state governments, while only 18 percent of such income came from charges to students. On the other hand, 60 percent of the instructional income of private colleges and universities was derived from charges to students. About 23 percent of the instructional income of private institutions of higher education was obtained from endowment and gift income. It is noteworthy that gift income exceeded endowment income for private colleges and universities in 1968-69.

A new source of instruction and general income reported in 1968-69 was "recovery of indirect costs." This item represented less than 3 percent of all general income, although the proportion was closer to 4 percent for private institutions. This income was the overhead allowance collected on federal government research grants and contracts and was intended to be equivalent to the cost of plant services and administrative services provided for research undertakings.

"Other" income was derived from sales and services of educational departments, such as charges of clinics, charges of a demonstration or laboratory school, income from a university farm, as well as income such as that from conferences, workshops and lectures, and interest on temporary investments of current funds.

## TABLE 3

Current Funds Revenues of Institutions of Higher Education by Major Program Categories
1968-69
(Millions of Dollars*)

| | Total | Public | Private |
|---|---|---|---|
| INSTRUCTION AND GENERAL | | | |
| Student Fees | $ 3,830 | $ 1,399 | $ 2,431 |
| Federal | 453 | 376 | 77 |
| States | 4,717 | 4,652 | 65 |
| Local | 571 | 569 | 2 |
| Endowment | 413 | 49 | 365 |
| Private Gifts | 606 | 54 | 552 |
| Recovery of Indirect Costs | 303 | 154 | 149 |
| Other | 839 | 456 | 382 |
| | $11,732 | $ 7,709 | $ 4,023 |
| SPONSORED RESEARCH | | | |
| Federal | $ 1,489 | $ 791 | $ 698 |
| States | 162 | 147 | 15 |
| Local | 23 | 5 | 18 |
| Federally Funded R&D Centers | 708 | 290 | 418 |
| Other | 212 | 107 | 105 |
| | $ 2,594 | $ 1,340 | $ 1,254 |
| PUBLIC SERVICE PROGRAMS | | | |
| Federal | $ 617 | $ 436 | $ 181 |
| States | 61 | 57 | 4 |
| Local | 21 | 7 | 13 |
| Hospitals | 497 | 315 | 182 |
| Other | 177 | 128 | 50 |
| | $ 1,373 | $ 943 | $ 430 |
| AUXILIARY ENTERPRISES | | | |
| Housing | $ 742 | $ 392 | $ 350 |
| Food | 926 | 500 | 426 |
| Other | 1,028 | 669 | 359 |
| | $ 2,696 | $ 1,561 | $ 1,135 |
| STUDENT AID | | | |
| Federal | $ 303 | $ 176 | $ 127 |
| States | 75 | 58 | 17 |
| Endowment | 61 | 11 | 50 |
| Gifts | 115 | 46 | 69 |
| Other | 25 | 8 | 17 |
| | $ 579 | $ 299 | $ 280 |
| TOTAL REVENUES | $18,974 | $11,852 | $ 7,122 |

(Continued)

TABLE 3 (Continued)

SOURCE: *Financial Statistics of Institutions of Higher Education: Current Funds Revenues and Expenditures, 1968-69*, Table 1.

*Details may not add up precisely to totals because of rounding.

Sponsored research income amounted to nearly 2.6 billion dollars; the federal government contributed about 57 percent. State governments made a modest contribution to higher education research, most of it probably directed to agricultural research. The other research income was that obtained from private foundations and from private corporations, supplemented by some endowment and some individual gift income. Obviously, as has been known for some time, but which the 1968-69 financial data clearly reveal, the research income of higher education is primarily income from the federal government. It is noteworthy also that private institutions received more research income from the federal government in 1968-69 than did public institutions of higher education.

Public service programs (not including federal government research and development centers) had a total income of nearly 1.4 billion dollars, of which 45 percent was obtained from the federal government. This support included income for agricultural extension services, continuing education projects under the Higher Education Act of 1965, and other public service projects. A sizeable amount of income was also obtained as patient charges in teaching hospitals. State government support for public service activities was confined largely to agricultural extension. It is not clear how state government subsidy of teaching hospitals was reported.

The reporting of auxiliary enterprise income provided data about housing and food service, but simply aggregated all remaining auxiliary services under a single heading: "other auxiliary enterprises." This category would include income from student unions and intercollegiate athletics, but, presumably, there are additional services here such as recreational programs, student health services, and similar services.

Finally, 52 percent of student aid income in the total amount of 579 million dollars was obtained from the federal government. The next largest source of such income was that from gifts. The state government expenditures for student aid purposes are under reported here; only income derived by institutions of higher education directly from the state is included. Most state student aid programs involve grants made directly to students rather than grants made to colleges and universities which in turn make grants to individual students. Thus, federal government student aid programs involve, primarily, grants to institutions; state government student aid programs involve, primarily, grants directly to students.

## Income By Type of Institution

Thus far in this analysis, we have been concerned with the sources of income for various kinds of programs undertaken by higher education. It is also useful to examine sources of income by types of institutions.

For statistical purposes, the Office of Education utilizes six categories: universities—public and private; other four-year institutions—public and private; and two-year institutions—public and private. The exact basis for classification as universities, other four-year institutions, and two-year institutions is not indicated. On the other hand, the Office of Education does report the number of institutions which have been included in each cell. For 1968-69, 2,500 institutions were surveyed; the numbers of respondents were as follows:[5]

| | Public | Private | Total |
|---|---|---|---|
| Universities | 95 | 64 | 159 |
| Other Four-year Institutions | 309 | 1,025 | 1,334 |
| Two-year Institutions | 593 | 226 | 819 |
| | 997 | 1,315 | 2,312 |

It seems likely that the category of universities embraces most of the institutions defined by the Carnegie Commission on Higher Education as doctoral-granting universities; the category of other four-year institutions embraces most of the institutions classified by the Carnegie Commission as comprehensive universities and colleges, liberal arts colleges, and separate professional schools; and that the category of two-year institutions includes the community colleges, junior colleges, and technical institutes throughout the United States.

As one might expect, there are substantial differences in the patterns of income among these various types of institutions. These patterns are set forth in Table 4.

The first notable factor is the varying role of student fees in providing income for universities, other four-year institutions, and two-year institutions. The student fee income of public and private universities was quite similar, but the 95 public universities enrolled some 2 million students compared with only 700,000 students enrolled at the 64 private universities. There was a substantial difference in the average enrollment size of these universities, the average for public universities being nearly 22,000 students and the average for the private universities being just under 11,000 students.

For public "other four-year institutions," the average enrollment was over 5,600 students, while the average enrollment for the private other four-year institutions was approximately 1,200 students. The total enrollment of the public other four-year institutions was over 1.7 million students, compared with 1.2 million students in the private other four-year institutions.

The data in Table 4 clearly indicate the importance of student charges in financing the instructional programs of private institutions and the

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[5] *Financial Statistics of Institutions of Higher Education: Current Funds Revenues and Expenditures, 1968-69,* Appendix C.

TABLE 4

Current Funds Revenues
Of Institutions of Higher Education
By
Activities and By Types of Institutions
1968-69
(Millions of Dollars)

| | Universities | | Other Four-Year Institutions | | Two-Year Institutions | |
|---|---|---|---|---|---|---|
| | Public | Private | Public | Private | Public | Private |
| Instruction & General | | | | | | |
| Student Fees | $ 799 | $ 919 | $ 406 | $1,387 | $ 194 | $ 125 |
| States | 2,659 | 50 | 1,440 | 15 | 553 | — |
| Federal | 141 | 48 | 182 | 27 | 54 | 3 |
| Local | 12 | — | 73 | 2 | 483 | — |
| Endowment | 43 | 203 | 4 | 158 | 2 | 4 |
| Private Gifts | 46 | 197 | 6 | 328 | 2 | 27 |
| Recovery of Indirect Costs | 137 | 125 | 16 | 23 | 1 | — |
| Other | 380 | 255 | 52 | 122 | 24 | 5 |
| TOTAL | $4,217 | $1,797 | $2,179 | $2,062 | $1,313 | $ 164 |
| Sponsored Research | | | | | | |
| Federal | $ 737 | $ 622 | $ 52 | $ 74 | $ 1 | $ 1 |
| States | 134 | 12 | 14 | 3 | — | — |
| Local | 4 | 17 | 1 | — | — | — |
| Federally Funded R&D Centers | 290 | 273 | 1 | 146 | — | — |
| Other | 99 | 86 | 7 | 19 | — | — |
| TOTAL | $1,264 | $1,010 | $ 75 | $ 243 | $ 1 | $ 1 |
| Public Service Programs | | | | | | |
| Federal | $ 325 | $ 114 | $ 86 | $ 64 | $ 25 | $ 3 |
| States | 44 | 2 | 9 | 2 | 4 | — |
| Hospitals | 270 | 131 | 45 | 51 | — | — |
| Other | 117 | 42 | 14 | 21 | 4 | — |
| TOTAL | $ 756 | $ 289 | $ 154 | $ 138 | $ 33 | $ 3 |
| Auxiliary Enterprises | | | | | | |
| Housing | $ 243 | $ 103 | $ 140 | $ 224 | $ 10 | $ 23 |
| Food | 266 | 98 | 205 | 299 | 28 | 30 |
| Other | 432 | 171 | 177 | 173 | 60 | 14 |
| TOTAL | $ 941 | $ 372 | $ 522 | $ 696 | $ 98 | $ 67 |
| Student Aid | | | | | | |
| Federal | $ 122 | $ 76 | $ 43 | $ 48 | $ 11 | $ 2 |
| States | 26 | 5 | 27 | 12 | 5 | 1 |
| Endowment | 10 | 27 | 1 | 23 | — | — |
| Gifts | 34 | 34 | 8 | 34 | 3 | 1 |
| Other | 4 | 9 | 3 | 7 | 2 | 1 |
| TOTAL | $ 196 | $ 151 | $ 82 | $ 124 | $ 21 | $ 5 |
| GRAND TOTAL | $7,374 | $3,619 | $3,012 | $3,263 | $1,466 | $ 240 |

SOURCE: *Financial Statistics of Institutions of Higher Education: Current Funds Revenues and Expenditures, 1968-69*, Table 3.

importance of state appropriations in financing public institutions. Even for public two-year institutions, the amount of state government support was larger than that of local governments.

The recovery of indirect costs is obviously an important source of income only for the universities, both public and private. The amount of such recovery in 1968-69 was quite similar for both categories.

It is necessary to state once again that federal government support of instruction was directed primarily to the limited number of institutions created by and in large part financed by the federal government, including the military academies, other military schools, and higher education institutions located in the District of Columbia.

As sponsored research is shown in the table, the role of the universities in the performance of this research and the support of the federal government are both clearly underlined.

The federal government is the major source of support for public service programs at public universities, followed closely by income obtained from teaching hospitals. Federal government support of public service programs at private universities totals less than the income from teaching hospitals.

Income from housing and food service varies, depending in large part upon whether the institution has a residential or a commuting student body. It is interesting to note that the public universities had the largest income under the heading of "other" auxiliary enterprises. This probably indicates that these 95 universities are quite heavily involved in large-scale intercollegiate athletics.

When we examine the income figures for student aid, it is clear that for all types of institutions, public and private, the federal government is the principal source of support for this activity.

## Expenditures by Types of Institutions

Just as it is instructive to examine current income for 1968-69, it is equally helpful to analyze current expenditures by type of institution. The appropriate data are presented in Table 5.[6]

TABLE 5

Current Funds Expenditures of Institutions of Higher Education
By Activities and By Types of Institutions
1968-69
(Millions of Dollars)

| | Universities | | Other Four-Year Institutions | | Two-Year Institutions | |
|---|---|---|---|---|---|---|
| | Public | Private | Public | Private | Public | Private |
| Instruction & General | | | | | | |
| Instruction & Departmental Research | $2,071 | $ 915 | $1,211 | $ 948 | $ 757 | $ 71 |

[6] See Appendix II for Conversion Table—Current Funds Expenditures.

TABLE 5 (Continued)

| | Universities | | Other Four-Year Institutions | | Two-Year Institutions | |
|---|---|---|---|---|---|---|
| | Public | Private | Public | Private | Public | Private |
| Organized Activities | 282 | 148 | 40 | 52 | 12 | 1 |
| Libraries | 190 | 99 | 120 | 107 | 51 | 7 |
| Plant Operation | 440 | 206 | 269 | 264 | 138 | 27 |
| Other | 610 | 317 | 437 | 598 | 275 | 57 |
| TOTAL | $3,593 | $1,685 | $2,077 | $1,969 | $1,233 | $ 163 |
| Sponsored Research | | | | | | |
| Sponsored Research | $ 924 | $ 712 | $ 63 | $ 93 | $ 1 | $ 1 |
| Federally Funded R&D Centers | 287 | 266 | 1 | 144 | — | — |
| Other Separately Budgeted Research | 214 | 27 | 8 | 3 | 1 | — |
| TOTAL | $1,425 | $1,005 | $ 72 | $ 240 | $ 2 | $ 1 |
| Public Services | | | | | | |
| Hospitals | $ 287 | $ 134 | $ 56 | $ 50 | $ 0 | $ 0 |
| Extension | 358 | 21 | 34 | 29 | 29 | 1 |
| Other | 393 | 162 | 92 | 72 | 26 | 3 |
| TOTAL | $1,038 | $ 317 | $ 182 | $ 151 | $ 55 | $ 4 |
| Auxiliary Enterprises | | | | | | |
| Housing | $ 209 | $ 108 | $ 132 | $ 198 | $ 9 | $ 17 |
| Food Services | 245 | 97 | 189 | 266 | 27 | 24 |
| Other | 420 | 167 | 174 | 190 | 59 | 13 |
| TOTAL | $ 874 | $ 372 | $ 495 | $ 654 | $ 95 | $ 54 |
| Student Aid Grants | $ 258 | $ 228 | $ 95 | $ 213 | $ 21 | $ 8 |
| Current Funds Expended for Plant Improvements | $ 256 | $ 69 | $ 83 | $ 79 | $ 77 | $ 11 |
| TOTAL | $7,444 | $3,676 | $3,004 | $3,306 | $1,483 | $ 211 |

SOURCE: *Financial Statistics of Institutions of Higher Education: Current Funds Revenues and Expenditures, 1968-69*, Table 4.

When one examines the expenditures for instruction and general operation, the distribution of the outlays is particularly interesting. The distribution on a percentage basis is as follows:

| | Public University | Private University | Public Other | Private Other | Public Two-year | Private Two-year |
|---|---|---|---|---|---|---|
| Departmental Instruction & Research | 58 | 54 | 58 | 48 | 61 | 44 |
| Organized Activities | 8 | 9 | 2 | 4 | 1 | — |
| Libraries | 5 | 6 | 6 | 5 | 4 | 4 |
| Plant Operation | 13 | 12 | 13 | 13 | 12 | 17 |
| Other | 16 | 19 | 21 | 30 | 22 | 35 |
| | 100 | 100 | 100 | 100 | 100 | 100 |

The pattern in the distribution of expenditures for the public institutions is quite similar, except that the public two-year institutions spend a higher proportion under the heading of "other." This proportion undoubtedly indicates the extensive student services offered by the two-year public colleges. It seems probable that the public other four-year institutions may also be involved in extensive student service counseling. These expenditures reflect the open door admissions policy which is practiced in almost all public two-year institutions and which is also largely a policy of the public other four-year institutions.

The primary fact revealed in this pattern of distribution of expenditures by the private institutions is the sizeable percentage devoted to "other" costs. In these instances, the high proportion does not indicate extensive student counseling operations. Rather, it indicates the substantial cost of their student recruitment and their fund-raising activities.

When we examine expenditures other than those for instruction and general operation, it is especially important to contrast outlays with income. In the category of sponsored research, by a comparison of the data in Tables 4 and 5, we find that the public universities spent more than they received in earmarked income. On the other hand, the income and expenditures for sponsored research in private universities, public other four-year institutions, and private other four-year institutions were essentially in balance. This was also the case for the two-year institutions, but the volume of the activity was negligible.

Under the category of public service activities, the tables show that the income of teaching hospitals was generally less than the expenditures for their operation, although the discrepancy is not so great as one might have anticipated. It seems probable from this fact that operating subsidies from state and local governments for hospital care of indigent patients have been reported as hospital income.

Otherwise, the expenditures reported for extension and continuing education and for "other public service programs" generally exceeded income reported under the headings of "other sponsored programs" and "other public service programs." The discrepancies here probably reflect a fault in reporting practice. It is probable that most institutions of higher education spend on continuing education and other public service projects about what they receive in income earmarked for these purposes. Public broadcasting by educational television stations owned entirely by an institution of higher education could be an exception to this rule.

In the category of auxiliary enterprises, income generally exceeded expenditures. The one reported exception occurred in the data for housing at private universities. In this instance, for this group of institutions, housing expenditure exceeded housing income. In addition, private other four-year institutions reported expenditures for "other auxiliary enterprises" in excess of revenues from this source. This is probably a correct representation of the situation and tells us that these institutions as a

group spend more money for intercollegiate athletics than they obtain in income for this activity.

Without exception, all types of institutions spent more for student aid than they obtained in income for this program. The amount of the deficit between income and expenditures, in millions of dollars, as of 1968-69 was as follows:

| | Deficit in millions of dollars |
|---|---|
| Public Universities | 62 |
| Private Universities | 77 |
| Public Other Four-year Institutions | 13 |
| Private Other Four-year Institutions | 89 |
| Public Two-year Institutions | 1 |
| Private Two-year Institutions | 3 |

It is inevitable that some kind of comparison of expenditures by types of institutions should be made on a per student basis. The differences in enrollment and program among institutions are so great that the only common denominator is that of dollars spent per student.

Expenditure per student, however, is a very poor, indeed a very misleading, common denominator—for two very good reasons. The usual enrollment count is made on a headcount basis, and this figure is misleading because of the different instructional loads occasioned by full-time as contrasted with part-time students. If enrollment is to be used as a common denominator, we must know the number of full-time students and the number of part-time students, and we must apply some "deflator" for the part-time enrollment.

The other reason why enrollment is an inadequate common denominator among institutions of higher education is even more important. Institutions differ substantially in the programs they offer, programs involving instruction, and other programs as well. There is a great deal of difference in the costs among institutions; whether or not there are offerings in medical education, education at the Ph.D. level, agricultural education, engineering education, and other professional programs has great impact. It also makes a great deal of difference in the cost experience of institutions if they operate a teaching hospital, perform extensive sponsored research, undertake extensive continuing education, etc.

Nonetheless, the National Center for Educational Statistics did offer some data indicating total expenditures per student.[7] These were gross expenditures and were not presented in terms of any component parts. The results have a general interest, but must be interpreted only by one familiar with the operations and financing of institutions of higher education.

Even though the data can be subject to misunderstanding, it seems worthwhile to make an analysis of current expenditures as of 1968-69 in

[7] *Financial Statistics of Institutions of Higher Education: Current Funds Revenues and Expenditures, 1968-69*, Table C.

terms of enrollment. Such an analysis is more useful, however, if it is made in some detail. This has been done in Table 6.

**TABLE 6**
**Current Funds Expenditures**
**Of Institutions of Higher Education**
**Dollars Per Student**
**1968-69**

| | Universities | | Other Four-Year Institutions | | Two-Year Institutions | |
|---|---|---|---|---|---|---|
| | Public | Private | Public | Private | Public | Private |
| Instruction & General | | | | | | |
| Instruction | $ 994 | $1,300 | $ 697 | $ 759 | $ 459 | $ 477 |
| Organized Activities | 135 | 210 | 23 | 42 | 7 | 7 |
| Libraries | 91 | 141 | 69 | 86 | 31 | 47 |
| Plant Operation | 211 | 293 | 155 | 211 | 84 | 181 |
| Other | 293 | 450 | 251 | 479 | 167 | 383 |
| Sponsored Research | $ 684 | $1,428 | $ 41 | $ 192 | $ 1 | $ 7 |
| Public Services | $ 498 | $ 450 | $ 105 | $ 121 | $ 33 | $ 27 |
| Auxiliary Enterprises | $ 419 | $ 528 | $ 285 | $ 524 | $ 58 | $ 362 |
| Student Aid | $ 124 | $ 324 | $ 55 | $ 171 | $ 13 | $ 54 |
| TOTAL EXPENDITURES PER STUDENT | $3,449 | $5,124 | $1,681 | $2,585 | $ 853 | $1,545 |

SOURCE: *Financial Statistics of Institutions of Higher Education: Current Funds Revenues and Expenditures, 1968-69*, Table C and Table 4.

Departmental instruction and research per student are most expensive at the universities, because they offer the extensive programs in graduate and graduate professional education. But it is interesting to note that for all types of institutions, departmental instruction costs more at private institutions than at public institutions. In every single category of instructional expense, the private institution spends more than its public counterpart by type of institution. The differences are especially noteworthy when it comes to overhead expense.

Further, it is interesting to note that private universities and private other four-year institutions receive more research support per student than do their public counterparts.

It is also worth noting that the private institutions spend more per student on student aid than do the public institutions. These data reflect the differences in tuition charges by the various types of public and private institutions.

## Summary

An analysis of the 1968-69 revenue and expenditure data for institutions of higher education reveals several important facts. These may be summarized as follows, not necessarily in the order of their importance:

1. For 2,312 reporting institutions of higher education, current funds revenues in 1968-69 amounted to 18.9 billion dollars, and current funds expenditures amounted to 18.5 billion dollars. Total student enrollment of the reporting institutions that year was estimated at over 7.5 million students.
2. Of the 18.5 billion dollars in expenditures, 58 percent was committed to instruction and general operation, nearly 15 percent to sponsored research, 10 percent to public service activities, 13 percent to auxiliary enterprises, and 4 percent to student aid.
3. In terms of income, general income was more than sufficient to meet expenditures for instruction and general operation. The "surplus" general income was used to support sponsored research, student aid, and plant improvements.
4. The instructional and general income of public institutions of higher education was obtained primarily from appropriations by state governments. The second largest source of such income was student fees.
5. The federal government was not an important source of income for the instruction and general operation of public and private colleges. Most such federal government support was directed to a few special institutions: the military academies, other military schools, Howard University, Federal City College, and certain other specialized institutions.
6. The principal source of income for the instruction and general operation of private colleges and universities was that obtained from student charges. Philanthropy provided the second largest source of such income.
7. The sponsored research activities of institutions of higher education were supported primarily by the federal government.
8. The major source of support for public service programs was the federal government, with hospital income the second largest source of support.
9. The federal government provided more than half of all income earmarked for student aid, but institutions spent 50 percent more for student aid than the earmarked income they received for this purpose.
10. Universities, both public and private, are the institutions primarily involved with sponsored research and public service activities.

11. Although public universities accounted for 55 percent of the enrollment of all public four-year institutions, they received two-thirds of state government appropriation support. This circumstance reflects the higher cost of extensive graduate and graduate professional programs of instruction.

12. Although private universities accounted for one-third of the total enrollment of all private four-year institutions, their instructional expenditures were nearly one-half of the total instructional expenditures. This circumstance also reflects the higher cost of extensive graduate and graduate professional programs of instruction.

13. There was a common pattern to be observed in the distribution of instructional and general expenditures by function or activity. There were higher costs of overhead at private institutions, and, apparently, higher costs of student services at public institutions with an open door admissions policy.

14. Private institutions of higher education spent more per student than did their counterpart types of public institutions.

15. On an enrollment basis, the federal government provided more research support to private universities and to private other four-year institutions than it did to the public institutions in these two categories.

# PART II

## REVIEW OF STUDIES

## OF HIGHER EDUCATION FINANCING

*There have been four studies or reports published in the past two or three years which have dealt in particular with the financial problems confronting colleges and universities in the United States, primarily since 1969. The most substantial of these studies, by Earl F. Cheit, was undertaken for the benefit of the Carnegie Commission on Higher Education.*[1] *The second was a special report and follow-up on the financial status of private institutions of higher education, prepared by William W. Jellema of the Association of American Colleges.*[2] *A third study examined the income and expenditure experience of 48 private, four-year colleges.*[3] *And the fourth was a report and recommendations of the Carnegie Commission, issued in June, 1972, entitled* The More Effective Use of Resources.[4] *There is a fifth study which might be added to this list; but because of its very special focus of attention, it will be omitted from this discussion.*[5]

It is interesting to note that the one major study on higher education undertaken within the federal government between 1969 and 1971 had virtually nothing to say about the financing of institutions of higher

[1] Earl F. Cheit, *The New Depression in Higher Education*, a general report for the Carnegie Commission on Higher Education and The Ford Foundation (New York: McGraw-Hill Book Company, 1971).

[2] Entitled "The Red and the Black," this special preliminary report was printed and distributed by the Association of American Colleges, Washington, D.C., but without a date or other identification. The report was made public early in 1971. A follow-up report in mimeograph was prepared by Dr. Jellema later in 1971 and released in early 1972. It simply confirmed earlier observations under the heading "Redder and Much Redder". A book based upon this research was scheduled for publication late in 1972 or early in 1973.

[3] Hans H. Jenny and G. Richard Wynn, *The Turning Point* (Wooster, Ohio: The College of Wooster, 1972).

[4] The Carnegie Commission on Higher Education, *The More Effective Use of Resources*, a report and recommendations by the Commission (New York: McGraw-Hill Book Company, 1972).

[5] June O'Neill, *Resource Use in Higher Education: Trends in Outputs and Inputs, 1930 to 1967*, a report prepared for the Carnegie Commission on Higher Education (Berkeley, California: The Carnegie Commission on Higher Education, 1971). Ms. O'Neill came to the conclusion that there had been no *real* increase in costs of instruction per credit hour in the period from 1930 to 1967. This study found that the output of student credit hours increased from an index number of 100 in 1929-30 to an index number of 600 in 1967-68. The data on student credit hours were weighted, however, according to lower division, upper division, and graduate. This weighting

(Continued on next page)

education.[6] The report was critical of many programs and operations of institutions of higher education, and was particularly critical of state governments, insofar as their organization for the administration of higher education was concerned. But nowhere in this review and criticism of colleges and universities was there any mention of costs or financing of these institutions.

In the data and observations presented by the four studies mentioned above, there is a considerable agreement both in diagnosis and in prescription. These assessments and these recommendations deserve careful study in every single college and university.

All four studies are agreed that beginning about 1969 or 1970, for many colleges and universities in this country, the rapid increases in income which had been made available to institutions of higher education during the previous ten years suddenly came to a halt. In the words of the Carnegie Commission, the income of colleges and universities "leveled off." Yet, colleges and universities were still expanding their activities and still increasing their costs. The push for expanded graduate programs was still under way. New emphasis was placed on the recruitment of minority students, and this effort meant an increase in student aid expenses and the provision of new programs of remedial or developmental instruction. There were demands that other new programs of instruction be started, such as Black Studies programs, and that other new supporting services be added, as child care centers for women students with young children or drug abuse centers for students addicted to drugs. There were demands for additional, expensive items of instructional equipment. Faculties continued to expect salary increases greater than the average compensation advance of all other workers. And the ravages of inflation became especially virulent in 1968, 1969, and 1970.

At the same time these pressures for rising expenditures were still exerting great force upon the resources of a college or university, the income available to these institutions suddenly declined in *its rate of growth.* State governments which had made prodigious efforts to expand tax support of higher education during the 1960's began to encounter resistence to further expansion of costs. The economic recession which began in November, 1969, and which extended throughout most of 1970, and the

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made the increase in graduate education appear as an even larger output than would have otherwise been the case. While instructional operating expenses increased from 328 million dollars in 1929-30 to 6,830 million dollars in 1966-67, when the dollars were deflated for price level changes, the index of increased expenditures rose from 100 in 1929-30 to 600 in 1966-67. Upon the basis of these two findings, Ms. O'Neill concluded that there had been no real increase in costs of instruction over this period of time.

[6] U.S. Department of Health, Education, and Welfare, *Report on Higher Education* (Washington: U.S. Government Printing Office, 1971). This is the report of a study committee of which Frank Newman was chairman.

slow economic recovery of 1971, encouraged state governments to take a new look at their appropriations in support of higher education. It was no longer politically fashionable to continue to raise taxes and to provide more income for public institutions of higher education, which, by 1970, were enrolling 75 percent of all students.

The federal government also found itself in a financial crisis as of 1968. The costs of the war in Vietnam had become continually greater without any corresponding increase in federal taxation or any corresponding decrease in non-war expenditures. These two developments had much to do with fueling the fires of inflation. When a slowdown in federal expenditures finally began in 1968, it necessarily made an impact upon the financing of colleges and universities. The slowdown affected those universities receiving substantial federal government support for research, for research related physical plant, and for instruction and plant in medical education and the other health sciences. The slowdown affected all colleges and universities in the resources they had available for student aid.

Moreover, the continuing increase in student fee charges at the private colleges and universities was finally perceived as counter-productive. It was suddenly realized in 1970 that private colleges and universities could no longer maintain their current enrollments as they continued to increase charges to students. Private colleges and universities, in general, had sought or experienced only modest enrollment growth during the 1960's. In addition, the public institutions greatly expanded their plants in order to accommodate a threefold increase in students, while charges to students at public institutions remained at relatively modest levels. Therefore, the private institutions of higher education found themselves facing enrollment losses and a consequent loss of vital income.

The Carnegie Commission on Higher Education in its 1972 report identified three primary factors in the financial difficulties of higher education: 1) quantitative and qualitative growth in programs; 2) general inflation and the continuing redistribution of income which enabled faculty salaries to grow at a rate of 6 percent per year compared with 5 percent per year for all other Americans; and 3) a leveling off of income. The Carnegie Commission then observed:

> For these three reasons a confrontation has developed between institutional expectations and the hard realities of the national situation. Collisions, little and big, are shaking the structure of higher education.

In his detailed study of 41 colleges and universities, Earl F. Cheit referred to the "new cost-income problem." He found that college presidents were generally aware of the slowdown in income growth, but that they had difficulty in communicating the reality of these circumstances to their internal constituencies (students and faculty) and to their external publics (alumni, foundations, business executives and professional leaders, legislators, news people, and others).

The 41 colleges and universities studied by Cheit encompassed 23 private institutions and 18 public institutions. The 23 private institutions included 9 highly selective liberal arts colleges, 5 less selective liberal arts colleges, 5 research universities, and 4 other doctoral degree-granting universities. The 18 public institutions included 7 research universities, one other doctoral degree-granting university, 5 comprehensive state universities, and 5 community colleges.

In general, Professor Cheit found the private institutions to be in greater financial difficulty than the public institutions. He found the private research universities facing financial stringency primarily because of a reduction in federal research grants. The private doctoral degree-granting universities and even some of the research universities were in trouble because of price competition from public community colleges and from public universities.

The first report for the Association of American Colleges found that real expenditures per student at the private institutions increased 65 percent between July 1, 1958, and June 30, 1968, without any increase in productivity. Dr. Jellema found increased expenditures for salaries, for student aid, for operation of the plant, for security, and for new programs reaching minority students. By June, 1970, the "average" private institution was running a deficit in the relationship of income to expenditures. Dr. Jellema's report in early 1972 simply confirmed these findings. Now, however, it was an unusual private institution which did not face an operating deficit.

The study made by the Vice President of the College of Wooster and his associate reviewed the income and expenditure growth between 1960 and 1970 for 48 somewhat similar highly selective private liberal arts colleges. During the decade the annual compound rate of growth of expenditures for these 48 colleges was as follows:

| | Percent Annual Compound Growth |
|---|---|
| Student Aid | 13.1 |
| Instruction | 10.7 |
| Library | 12.0 |
| Plant Operation | 8.6 |
| Administration | 10.6 |
| Other | 3.1 |

Insofar as income was concerned, Jenny and Wynn found the following rates of growth for their 48 liberal arts colleges in the decade of the 1960's:

| | Percent Annual Compound Growth |
|---|---|
| Student Charges | 11.1 |
| Endowment | 7.7 |
| Gifts | 9.9 |
| Student Aid Grants and Gifts | 12.2 |
| Other | 11.3 |

The slower rate of growth for income compared with expenditures had paved the way for the "turning point" of 1970 in the financial difficulties of these private colleges.

When we turn from analysis to prescription, we find once again a considerable degree of agreement in these various studies. Dr. Jellema offered no recommendations, but, instead, pointed out the solutions which he found individual colleges and universities implementing in their financial crises. He found these kinds of action:

1. Internal borrowing from reserves and other funds to finance current deficits.
2. Further increases in tuition charges to students.
3. Deferring of plant maintenance.
4. Advocacy of financial grants for current operating expenses to be provided by state governments and the federal government.
5. Increased efforts to obtain student aid funds from government and from philanthropic gifts.
6. Efforts to increase support from related church bodies.

Dr. Jenny and Mr. Wynn called particular attention to two solutions which might hold some promise for dealing with the financial difficulties of the selective private liberal arts colleges. One was to reduce the outlay for student financial assistance to the level of income provided the institutions for this particular purpose, along with insistence that society through government and philanthropy increase its support of student aid programs. The other was to increase the student-faculty ratio, thereby reducing instructional costs per student and reducing the need for further increases in the tuition charges to students.

Dr. Cheit tailored his proposals to the situations of the various kinds of institutions included in his study. For the public community colleges, he called attention to the possibility of reducing costs or avoiding cost increases through larger classes and a higher ratio of students to faculty members. There was also the prospect of new sources of income, especially from increased state government and federal government funding. For the private liberal arts colleges, he suggested the need to redefine their role in relation to students and student instruction, the possibility of closing the gap between student charges and instructional costs, and the exploration of changes in state government policy toward private colleges (changes in the pricing policy of public institutions or changes in the provision of financial support for students enrolling in private institutions). For the state comprehensive universities, Dr. Cheit urged improved state government coordination of programs and better state government calculation of operating needs. For the public and private universities, both the research universities and the doctoral degree-granting universities, Dr. Cheit urged an increase in student aid funds, a broadened base of state

government support, and a careful review of internal operations to establish priorities, to relate costs to outputs, and to reduce program proliferation.

The June, 1972, report of the Carnegie Commission on Higher Education was a kind of "summing up" by the Commission on the matter of financing higher education. The points of view presented were drawn from staff studies and also, presumably, represented the collective judgment of the members themselves. The Commission set forth three general objectives in the utilization of available resources. First, the incremental increases in total expenditures of higher education should be restricted during the decade of the 1970's to inflation plus 2.5 percent per year. Secondly, the length of instructional time in various programs should be reduced, thus reducing the investment cost to the student and the investment cost per student to society. Thirdly, institutions should seek to reduce the annual costs of instruction per student.

In order to achieve these general objectives for the more effective utilization of resources, the Commission recommended the following kinds of actions:

1. The establishment of no new Ph.D. programs and the concentration of federal government research support in a smaller number of institutions.
2. Achievement in all institutions of the minimum enrollment size previously recommended and the avoidance of exceeding the maximum desirable size.[7]
3. Year-round operation.
4. A cautious increase in the student-faculty ratio.
5. Increased teaching loads for faculty.
6. Increased use of consortia for inter-institutional cooperation.
7. Merger of institutions to achieve minimum desirable size or economies of scale.

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[7] By types of institutions, the Carnegie Commission on Higher Education in its October, 1971, report, *New Students and New Places* (New York: McGraw-Hill Book Company, 1971), had recommended the following desirable sizes:

| | Minimum Size ("Peril Points") | Maximum Size ("Points for Reassessment") |
|---|---|---|
| Community Colleges | 2,000 | 5,000 |
| Liberal Arts Colleges | 1,000 | 2,500 |
| Comprehensive Universities & Colleges | 5,000 | 10,000 |
| Doctoral-granting Univ. | 5,000 | 20,000 |

These conclusions about size were presumably applicable to both public and private institutions. The Commission estimated that 23 percent of public doctoral-granting universities exceeded the suggested maximum size, that 90 percent of private compre-

(continued on next page)

8. A slower rate of future increase in faculty salaries.
9. Enrollment expansion of two-year colleges.
10. Slower rate of increase in federal research fund support of doctoral-granting universities.
11. Reduction in curriculum requirements for a degree.
12. Improved management and budgeting.

Summary

No recommendations dealing with the financial difficulties of colleges and universities from any single researcher or from any single group of persons is likely to command widespread enthusiasm, or early adoption. Colleges and universities, like other enterprises and institutions of our society, prefer to "muddle through."

It is noteworthy that in its June, 1972, report, the Carnegie Commission said little about the cost of student aid to the institutions of higher education. Presumably, the Commission had addressed itself to this problem at an earlier time (*Quality and Equality: New Levels of Federal Responsibility for Higher Education*, December, 1968; and *A Chance to Learn: An Action Agenda for Equal Opportunity in Higher Education*, March, 1970).

It is interesting to observe, also, that all the studies reviewed here have avoided any attempt to arrive at a formula for determining the individual as against the social investment in higher education. Each study has implicitly or explicitly assumed that the costs of instructional services to students will continue to be borne by students and by society (government and philanthropy) in some kind of mix. No one has ventured to propose what this mix ought to be, or how it might be restructured in the years ahead.

The various studies and observations have been cautious in their reference to a price competition among public and private colleges and universities. The fact of a great disparity in such charges is acknowledged. The fact that this disparity has had an impact upon the enrollment and the income of private institutions is also admitted. The studies and recommendations, however, have not cared to penetrate beyond these two statements.

Certainly, many doctoral degree-granting universities and many comprehensive universities and colleges will not be enthusiastic about a halt to the creation of new doctoral degree programs, or to a greater concentration of federal research support in a smaller number of universities.

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**(continued)**

**hensive universities and colleges were below the desirable minimum size, that 74 percent of public liberal arts colleges and 68 percent of private liberal arts colleges were below the desirable minimum size, and that 70 percent of the public and 98 percent of the private two-year institutions were below the desirable minimum size.**

Faculty members have probably not yet acclimated themselves to the prospect of a slowdown in faculty salary increases or of an increase in faculty teaching loads.

At the same time, the various studies of financial problems in recent years have been in substantial agreement about at least four basic aspects of academic administration:

1. There is a need for an increased public commitment of funds to student financial assistance, and institutions of higher education should be relieved of the necessity to devote general revenue to student assistance.
2. Higher education must prepare itself to adjust to a slower rate of growth in enrollment in programs and in income from that experienced in the decade from 1958 to 1968.
3. More attention should be given to cost reduction, or improved productivity, in higher education, through reduced course requirements for degrees and through increased faculty instructional loads.
4. Colleges and universities must be more self-conscious about their academic planning and about their management of resources available to them for accomplishment of objectives and programs.

# APPENDIX I

## CURRENT FUNDS REVENUES
## CONVERSION TABLE

| FROM<br>OFFICE OF EDUCATION STATISTICS | TO<br>MANAGEMENT DIVISION TABLES |
|---|---|
| I. EDUCATION AND GENERAL REVENUES | I. INSTRUCTION AND GENERAL |
| A. Student Tuition and Fees | A. Student Fees |
| B. Governmental Appropriations | B. Federal |
| 1. Federal Government | C. State |
| 2. State Government | D. Local |
| 3. Local Government | E. Endowment |
| C. Endowment Income | F. Private Gifts |
| D. Private Gifts | G. Recovery of Indirect Costs |
| E. Recovery of Indirect Costs | (Includes: |
| 1. Sponsored Research | Sponsored Research |
| 2. Other Sponsored Programs | Other Sponsored Programs) |
| F. Sales and Services of Educational Departments | H. Other (Includes: |
| G. Organized Activities Related to Educational Departments | Sales and Services |
| H. Other Sources | Organized Activities |
| I. Sponsored Research | Other Sources) |
| 1. Federal Government | II. SPONSORED RESEARCH |
| 2. State Government | A. Federal |
| 3. Local Government | B. State |
| 4. Nongovernmental | C. Local |
| J. Other Separately Budgeted Research | D. Other (Includes: |
| K. Other Sponsored Programs (to Public Service Programs) | Nongovernmental |
| 1. Federal Government | Other Separately Budgeted Research) |
| 2. State Government | E. Federally Funded R & D Centers (from Major Public Service Programs) |
| 3. Local Government | |
| 4. Nongovernmental | III. PUBLIC SERVICE PROGRAMS |
| II. MAJOR PUBLIC SERVICE PROGRAMS | A. Federal |
| A. Federally Funded R & D Centers (to Sponsored Research) | B. State |
| B. Hospitals | C. Local |
| C. Other Public Service Programs | D. Hospitals |
| | E. Other (Includes: |
| | Nongovernmental Other Sponsored Programs |
| | Other Public Service Programs) |

APPENDIX I (Continued)

| FROM<br>OFFICE OF EDUCATION STATISTICS | TO<br>MANAGEMENT DIVISION TABLES |
|---|---|
| III. AUXILIARY ENTERPRISES | IV. AUXILIARY ENTERPRISES |
| A. Housing | A. Housing |
| B. Food Services | B. Food |
| C. Other Auxiliary Enterprises | C. Other |
| IV. STUDENT AID GRANTS | V. STUDENT AID |
| A. Federal Government | A. Federal |
| B. State Government | B. States |
| C. Endowment Income | C. Endowment |
| D. Private Gifts and Grants | D. Gifts |
| E. Local Government | E. Other (Includes: |
| F. Other Student Aid Grants | Local |
| | Other Student Aid) |

# APPENDIX II

## CURRENT FUNDS EXPENDITURES

## CONVERSION TABLE

| FROM<br>OFFICE OF EDUCATION STATISTICS | TO<br>MANAGEMENT DIVISION TABLES |
|---|---|
| I. EDUCATION AND GENERAL EXPENDITURES<br>A. Instruction and Departmental Research<br>B. Organized Activities Related to Educational Departments<br>C. Libraries<br>D. Physical Plant Maintenance and Operation<br>E. Other Educational and General<br>F. Sponsored Research<br>G. Other Separately Budgeted Research<br>H. Other Sponsored Programs (to Public Services)<br>I. Extension and Public Service (to Public Services) | I. INSTRUCTION AND GENERAL<br>A. Instruction and Departmental Research<br>B. Organized Activities<br>C. Libraries<br>D. Plant Operation<br>E. Other<br><br>II. SPONSORED RESEARCH<br>A. Sponsored Research<br>B. Other Separately Budgeted Research<br>C. Federally Funded R & D Centers (from Major Public Service Programs) |
| II. MAJOR PUBLIC SERVICE PROGRAMS<br>A. Hospitals<br>B. Other Public Service Programs<br>C. Federally Funded R & D Centers (to Sponsored Research) | III. PUBLIC SERVICES<br>A. Hospitals<br>B. Extension (from Education and General Expenditures)<br>C. Other (Includes: Other Public Service Programs Other Sponsored Programs) |
| III. AUXILIARY ENTERPRISES<br>A. Housing<br>B. Food Services<br>C. Other Auxiliary Enterprises | IV. AUXILIARY ENTERPRISES<br>A. Housing<br>B. Food Services<br>C. Other |
| IV. STUDENT AID GRANTS | V. STUDENT AID GRANTS |
| V. CURRENT FUNDS EXPENDED FOR PHYSICAL PLANT ASSETS | VI. CURRENT FUNDS EXPENDED FOR PLANT IMPROVEMENTS |

## MANAGEMENT DIVISION PUBLICATIONS

BY 1990: DOUBLED ENROLLMENTS, TRIPLED COSTS. Charts showing the chronic financial squeeze with which most urban universities will have to learn to live.

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